STATEMENT OF BASIS

as required by LAC 33:IX.2411, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0122726; AI 148744; PER20070001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Armant Environmental Services, LLC
Armant Industrial Plant Site
Post Office Box 698
Vacherie, Louisiana 70090

II. **PREPARED BY:** Todd Franklin

DATE PREPARED: April 11, 2007

III. **PERMIT ACTION:** issue LPDES permit LA0122726, AI 148744; PER20070001

LPDES application received: February 5, 2007
Administrative Completeness Determination: February 19, 2007

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of **treated barge waste and wash waters, bilge and ballast waters, internal vacuum tank washwater, used crude inland oil spill waters, used oil and diesel fuel tank washwaters, washwater from oilfield equipment and vessels, industrial oily wastewater, slop wastewater, washdown waters from many sources including rail cars, storm water, grey water, and treated sanitary wastewater** from a new centralized waste treatment facility.

Waste classified as nonhazardous oilfield waste (NOW) or exploration and production waste (E&P waste) shall not be discharged. However, wash water from tanks or vessels containing NOW or E&P waste may be discharged provided the oilfield waste has been drained or removed from the tanks prior to washing and provided that the facility has fulfilled any requirements from the Department of Natural Resources for handling NOW or E&P Waste. Effluent contaminated with chlorinated organic compounds shall not be discharged at this facility.

An NPDES Permit Rating Work Sheet was completed for this facility. The results of the work sheet indicate that the facility should be classified as a minor facility.

B. The facility is located at 2141 Toth Road in Vacherie, St. James Parish.

C. The treatment facility will consist of oil separation, followed by biological digestion, followed by activated carbon filtration.

D. Outfall 001

Discharge Location: Latitude 30° 0′ 34″ North
Longitude 90° 43′ 58″ West

Description: treated barge waste and wash waters, bilge and ballast waters, internal vacuum tank washwater, used crude inland oil spill waters, used oil and diesel fuel tank washwaters, washwater from oilfield equipment and vessels, industrial oily wastewater, slop wastewater, washdown waters from many sources including rail cars, storm water, and treated grey water

Expected Flow: 0.144 MGD

Outfall 002

Discharge Location: Latitude 30° 0′ 22″ North
Longitude 90° 40′ 13″ West

Description: treated sanitary wastewater

Expected Flow: 30 GPD

V. RECEIVING WATERS:

The discharge from Outfall 001 is into Mississippi River in subsegment 070301 of the Mississippi River Basin. The discharge from Outfall 002 is into unnamed ditch; thence into Bayou Becnel; thence into Lac Des Allemands in subsegment 020202 of the Barataria Basin. These segments are not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 070301 of the Mississippi River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Full	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Full	N/A	Full	N/A	N/A

The designated uses and degree of support for Segment 020202 of the Barataria Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Full	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segments 070301 of the Mississippi River Basin and 020202 of the Barataria Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. Since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, LDEQ has determined that the issuance of this LPDES permit is not likely to adversely affect the Pallid sturgeon or its aquatic habitats. As instructed by the FWS in a letter dated September 29 from Watson (FWS) to Brown (LDEQ), this statement of basis has been sent to the FWS for review and consultation.

The receiving waterbody, Subsegment 020202 of the Barataria Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006, from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 070301, Mississippi River-from Monte Sano Bayou to Head of Passes, and 020202, Lac Des Allemands are not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

Final Effluent Limits:

OUTFALL 001 - treated barge waste and wash waters, bilge and ballast waters, internal vacuum tank washwater, used crude inland oil spill waters, used oil and diesel fuel tank washwaters, washwater from oilfield equipment and vessels, industrial oily wastewater, slop wastewater, washdown waters from many sources including rail cars, storm water, and grey water

The guidelines for the Centralized Waste Treatment Point Source Category are found in 40 CFR 437. This facility falls into this point source category. Specifically, this facility falls under the guidelines in 40 CFR 437.24, new source performance standards for Subpart B- Oils Treatment and Recovery.

The parameters listed in the EPA guidelines were compared to the same parameters used for LDEQ empirical limitations and the more stringent of the two values were screened against corresponding water quality standards. The more stringent values are being applied to Outfall 001.

BOD_5 and TSS limitations have been established in the permit to address grey water discharges from the facility.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Maximum	Basis
BOD_5	36	30 mg/l	45 mg/l	Statewide Sanitary Effluent Limitations Policy
TSS	36	30 mg/l	45 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Oil and Grease	---	---	15 mg/l	Best Professional Judgement (BPJ) based on limits imposed on similar discharges.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Maximum	Basis
Total Arsenic[1]	---	---	0.100 mg/l	LDEQ Empirical Numbers
Total Cadmium[1]	---	0.0102 mg/l	0.0172 mg/l	40 CFR 437.24
Total Chromium[1]	---	---	0.150 mg/l	LDEQ Empirical Numbers
Total Cobalt	---	18.8 mg/l	56.4 mg/l	40 CFR 437.24
Total Copper[1]	---	0.242 mg/l	0.5 mg/l	40 CFR 437.24
Total Lead[1]	---	---	0.150 mg/l	LDEQ Empirical Numbers
Total Mercury[1]	---	0.00647 mg/l	0.010 mg/l	Monthly Average based on 40 CFR 437.24; Daily Maximum based on LDEQ Empirical Numbers
Total Tin	---	0.165 mg/l	0.335 mg/l	40 CFR 437.24
Total Zinc[1]	---	---	1.00 mg/l	LDEQ Empirical Numbers
Bis (2-ethylhexyl) phthalate[1]	---	---	0.100 mg/l	LDEQ Empirical Numbers
Butylbenzyl phthalate	---	0.0887 mg/l	0.100 mg/l	Monthly Average based on 40 CFR 437.24; Daily Maximum based on LDEQ Empirical Numbers
Carbazole	---	0.276 mg/l	0.598 mg/l	40 CFR 437.24
n-Decane	---	0.437 mg/l	0.948 mg/l	40 CFR 437.24
Fluoranthene[1]	---	0.0268 mg/l	0.0537 mg/l	40 CFR 437.24
n-Octadecane	---	0.302 mg/l	0.589 mg/l	40 CFR 437.24

[1] If any individual analytical test result is less than the minimum quantification level (MQL) listed in Section X of this statement of basis, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement.

Other Effluent Limitations:

1) **pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

2) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Toxic Substances

Due to drinking water supply being a designated use, the permittee shall analyze the final effluent for the presence of the following toxic substances. The MQL is intended as action levels. Should a toxic substance exceed the MQL, the permittee shall determine the source of the substance and take whatever measures necessary to secure abatement in order to protect all drinking water sources downstream of the discharge. Records of any actions taken shall be made available upon request by any duly authorized regional inspectors and/or LDEQ Headquarter representatives.

A report containing the results of the lab analysis indicating if any toxic substances have exceeded the MQL including a brief summary of any abatement taken at the time, must be submitted to this Office within 20 days of completion of the analysis. **The first analysis shall be performed within one year following the effective date of the permit, and annually thereafter, by a 24-hour composite sample type.**

Reports must be submitted to the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

TOXIC SUBSTANCES

TOXIC SUBSTANCES (CAS NO.)	Required MQL (µg/l)	EPA Test Method
VOLATILE ORGANIC CHEMICALS		
Acrolein (107-02-8)	50	624
acrylonitrile (107-13-1)	50	624
benzene (71-43-2)	10	624
bromodichloromethane (dichlorobromomethane) (75-27-4)	10	624
bromoform (tribromomethane) (75-25-2)	10	624
carbon tetrachloride (56-23-5)	10	624
chlorobenzene (108-90-7)	10	624
chloroform (trichloromethane)	10	624
chloromethane (methyl chloride) (74-87-3)	50	624
1,1-dichloroethane (75-34-3)	10	624
1,2-dichloroethane (107-06-2)	10	624
1,1-dichloroethylene (75-35-4)	10	624
dichloromethane (methylene chloride) (75-09-2)	20	624
cis-1,3-dichloropropene	10	624
trans-1,3-dichloropropene	10	624
ethylbenzene (100-41-4)	10	624
para-dichlorobenzene*	---	---
1,1,2,2-tetrachloroethane (79-34-5)	10	624

tetrachloroethylene (127-18-4)	10	624
toluene (108-88-3)	10	624
1,1,1-trichloroethane (71-55-6)	10	624
1,1,2-trichloroethane (79-00-5)	10	624
trichloroethylene (79-01-6)	10	624
vinyl chloride (chloroethylene) (75-01-4)	10	624
ACID EXTRACTABLE ORGANIC CHEMICALS		
2-chlorophenol (95-57-8)	10	625
3-chlorophenol	10	625
4-chlorophenol	10	625
2,4-dichlorophenol (120-83-2)	10	625
2,3-dichlorophenol	10	625
2,5-dichlorophenol	10	625
2,6-dichlorophenol	10	625
3,4-dichlorophenol	10	625
2,4-dinitrophenol (51-28-5)	50	625
pentachlorophenol (87-86-5)	50	625
phenol (108-95-2)	10	625
2,4,6-trichlorophenol (88-06-2)	10	625
BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS		
anthracene (120-12-7)	10	625
benzidine (92-87-5)	50	625
bis(2-chloroethyl)ether (111-44-4)	10	625
bis(2-chloro-1-methylethyl)ether (39638-32-9)	10	625
bis(2-ethylhexyl)phthalate (117-81-7)	10	625
di-n-butyl phthalate (84-74-3)	10	625
1,3-dichlorobenzene (541-73-1)	10	625
1,2-dichlorobenzene (95-50-1)	10	625
1,4-dichlorobenzene (106-46-7)	10	625
3,3-dichlorobenzidine (91-94-1)	50	625
diethyl phthalate (84-66-2)	10	625
dimethyl phthalate (131-11-3)	10	625
2,4-dinitrotoluene (121-14-2)	10	625
1,2-diphenylhydrazine (122-66-7)	20	625
fluoranthene (206-44-0)	10	625
hexachlorobenzene (118-07-1)	10	625
hexachlorobutadiene (87-68-3)	10	625
hexachlorocyclopentadiene (77-47-4)	10	625
hexachloroethane (67-72-1)	20	625
isophorone (78-59-1)	10	625
nitrobenzene (98-95-3)	10	625
N-nitrosodimethylamine (62-75-9)	50	625

N-nitrosodiphenylamine (86-30-6)	20	625
PESTICIDES & PCBs		
aldrin (309-00-2)	0.05	608
PCB's (Total)	1.0	608
gamma-BHC (Lindane, Hexachlorocyclohexane) (58-89-9)	0.05	608
chlordane (57-74-9)	0.2	608
4,4"DDD (TDE) (72-54-8)	0.1	608
4,4"DDE (72-55-9)	0.1	608
4,4"DDT (50-29-3)	0.1	608
Dieldrin (60-57-1)	0.1	608
endosulfan I (alpha) (115-29-7)	0.1	608
endosulfan II (beta) (115-29-7)	0.1	608
endrin (72-20-8)	0.1	608
heptachlor (76-44-8)	0.05	608
methoxychlor*		---
2,3,7,8-tetrachlorodibenzo-p-dioxin (1764-01-6)	**	625
toxaphene (8001-35-2)	5.0	608
2,4-dichlorophenoxyacetic acid (2,4-D) (94-75-7)	10	509B
2-(2,4,5-trichlorophenoxy)proprionic acid	4	509B
METALS		
antimony (7440-36-0)	60	200.7
arsenic (7440-38-2)	10	206.2
barium*		---
beryllium (7440-41-7)	5	200.7
cadmium (7440-43-9)	1	213.2
chromium III (16065-83-1)	10	200.7
chromium VI (7440-47-3)	10	200.7
copper (7550-50-8)	10	220.2
lead (7439-92-1)	5	239.2
flouride*		---
mercury (7439-97-6)	0.2	245.1
nickel (7440-02-0)	40	200.7
nitrate (as N)*		---
selenium (7782-49-2)	5	270.2
silver (7440-22-4)	2	272.2
thallium (7440-28-0)	10	279.2
zinc (7440-66-6)	20	200.7
MISCELLANEOUS		
cyanide	20	335.2
total phenols	5	420.1

* In addition to the effluent lab result for this pollutant, also report MQL and Test Method used.

** Method 625 is a nonquantitative screen that is used to ascertain a positive or negative result. With proper QA/QC techniques, a positive result can be expected at a level above 1 ppm. If this test yields a positive response, then Method 613 would be appropriate to establish the quantitative value. Method 613 requires use of the dioxin standard which is dangerous and should not be used unnecessarily.

OUTFALL 002 – *treated sanitary wastewater*

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	---	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy for facilities of this size and type.
TSS	---	30 mg/l	45 mg/l	

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass *limitations are not necessary when applicable standards and limitations are expressed in other units of* measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD_5 and TSS in terms of concentration.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X MINIMUM QUANTIFICATION LEVELS (MQL) OF VARIOUS TOXIC SUBSTANCES IN THE PERMIT

BASE/NEUTRAL EXTRACTABLE ORGANIC CHEMICALS	Required MQL (µg/l)	EPA Test Method
bis(2-ethlhexyl)phthalate (117-81-7)	10	625
fluoranthene (206-44-0)	10	625
METALS	**Required MQL (µg/l)**	**EPA Test Method**
arsenic (7440-38-2)	10	206.2
cadmium (7440-43-9)	1	213.2
copper (7550-50-8)	10	220.2
lead (7439-92-1)	5	239.2
mercury (7439-97-6)	0.2	245.1
nickel (7440-02-0)	40	200.7
zinc (7440-66-6)	20	200.7

XI. PREVIOUS PERMITS:

There have been no previous permits issued to this facility.

XII. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

There have been no inspections performed at this facility.

B) Compliance and/or Administrative Orders

A review of the files indicates that no enforcement actions have been administered against this facility.

C) DMR Review

Because this is a proposed facility, no DMRs have been submitted.

XIII. ADDITIONAL INFORMATION:

LDEQ reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future. Additional limitations and/or restrictions are based upon water quality studies and can indicate the need for advanced wastewater treatment. Water quality studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5mg/L $CBOD_5$ and 2 mg/L NH_3-N. Prior to upgrading or expanding this facility, the permittee should contact LDEQ to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

The nearest drinking water intakes, Lutcher Water System and Gramercy Water System, are both located downstream from the discharge point(s). Subsegment 070301 of the Mississippi River Basin has the designated use of drinking water supply. Therefore, monitoring for Toxic Substances will be a requirement of this permit.

The following **Monitoring Requirements, Sample Types, and Frequency of Sampling** are required in this permit.

Outfall 001

Effluent Characteristics	Monitoring Requirements Measurement Frequency	Sample Type
Flow	Continuous	Recorder
BOD_5	2/month	Grab
TSS	2/month	Grab
pH	2/month	Grab
Oil & Grease	2/month	Grab
Total Arsenic	2/month	Grab
Total Cadmium	2/month	Grab
Total Chromium	2/month	Grab
Total Cobalt	2/month	Grab
Total Copper	2/month	Grab
Total Lead	2/month	Grab
Total Mercury	2/month	Grab
Total Tin	2/month	Grab
Total Zinc	2/month	Grab
Bis (2-ethylhexyl) phthalate	2/month	Grab
Butylbenzyl phthalate	2/month	Grab
Carbazole	2/month	Grab
n-Decane	2/month	Grab
Fluoranthene	2/month	Grab
n-Octadecane	2/month	Grab
Toxic Substances	1/year	24 Hr. Composite

Outfall 002

Effluent Characteristics	Monitoring Requirements Measurement Frequency	Sample Type
Flow	1/6 months	Estimate
BOD_5	1/6 months	Grab
TSS	1/6 months	Grab
Fecal Coliform	1/6 months	Grab
pH	1/6 months	Grab

XIV TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

XV REFERENCES:

Louisiana Water Quality Management Plan, Vol. 8, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 2002.

Louisiana Water Quality Management Plan, Vol. 5, "Water Quality Inventory", Louisiana Department of Environmental Quality, 2002.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart B - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Armant Environmental Services, LLC, Armant Industrial Plant Site, February 5, 2007.